SDOT

Seattle Department of Transportation

Bike Share Program
Seattle, Washington

SEPA Checklist

November 7, 2016

STATE ENVIRONMENTAL POLICY ACT (SEPA) ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of proposed project, if applicable:

City of Seattle Bike Share Program (BSP)

2. Name of applicant:

Seattle Department of Transportation (SDOT)

3. Address and phone number of applicant and contact person:

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4. Date checklist prepared:

November 7, 2016

5. Agency requesting checklist:

SDOT

6. Proposed timing or schedule (including phasing, if applicable):

It is anticipated that the BSP would launch in summer 2017 and operations would continue for an initial 10-year term that could be extended into the future.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Yes. The BSP would continue to expand across the City in the service area in accordance with SDOT's Vision and priorities, and availability of future funding opportunities. There may also be a regional opportunity through an Interlocal Agreement or other means for bike share to expand in the future to other cities in the region including Bellevue, Kirkland, Redmond, Issaquah, and Tacoma.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- SDOT issued the Determination of Nonsignificance (DNS) in February 2012 for the Transit Master Plan.
- In June 2013, SDOT issued a DNS for the programmatic term permit allowing Pronto to operate a bicycle share program within the City's rights-of-way. This was made possible by amending the Seattle Municipal Code (SMC) to allow for the use of rights-of-way for bike share activities and authorize bike-share-related vending in public places under Title 15 Sidewalk and Street Use Code.
- The Seattle Climate Action Plan was Adopted by the City in June 2013.
- SDOT issued the DNS in December 2013 for the Bicycle Master Plan.
- The City issued the Seattle Comprehensive Plan Final Environmental Impact Statement in May 2016.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Yes. There are multiple projects within the City that are currently pending City approval, including projects related to transportation, residential, commercial, and industrial development. SDOT will consider existing and ongoing development proposals when planning station locations and the service area for the BSP.

10. List any government approvals or permits that will be needed for your proposal, if known.

Depending on the location, one or more of these City permits may be required for BSP stations:

- An optional Street Use Permit may be obtained if located within City rights-of-way;
- Utility Service Permit from Seattle City Light and Seattle Department of Construction and Inspections;
- Sign Code Permit from Seattle Department of Construction and Inspections if located on private property;
- Shoreline Substantial Development Permit or Exemption from Seattle Department of Construction and Inspections if located within a Shoreline District;
- City Preservation/Historic District Board Certificate of Approval if located within a historic district; and

- Seattle Parks and Recreation Department approval if located within City parks property.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Seattle's bike share vision is part of the overall vision of SDOT to deliver a high-quality transportation system for Seattle. The City envisions that bike share would become a new personal mobility option that increases access to affordable transportation, provides first and last mile connections, promotes active and healthy living, is environmentally friendly and equitable, supports the local economy, and is financially sustainable. It is intended that the BSP would:

- Become an integral part of Seattle's public transportation system, particularly enhancing first/last mile access to transit.
- Support City and Move Seattle initiatives related to public transportation, innovation, and equity.
- Transform the BSP into a financially sustainable system.

SDOT has selected Bewegen to supply equipment, including pedal-assisted bicycles, and launch and operate an expanded financially capable BSP. The City is prepared to invest up to $5 million in capital costs in establishing this new system. Although the City seeks to retain existing sponsors as part of the transition, no commitments have been made between the City and sponsors for the new BSP. The City's foremost focus is that significant additional sponsorship money is raised to ensure financial sustainability of the expanded system. Funding is also anticipated to be available from existing and future grant opportunities.

The following major tasks would be accomplished by the City and Bewegen during implementation of the BSP consistent with state and federal grant funding requirements: removal of existing Pronto equipment; resale of existing Pronto equipment; upgrade compatible equipment (helmet dispensing units); and implementation of new/replaced equipment at selected locations in the existing and expanded service area. The transition would occur for a short duration to minimize impacts to existing users. Existing Pronto members would be given complementary usage to the new BSP equivalent to the value remaining on their existing membership. The BSP would continue to offer reduced-cost memberships to low-income individuals and provide services and outreach for immigrant and non-English speaking populations in the city.

Each BSP station would contain docking points, wayfinding panels and payment kiosks. Bike share stations would be customizable, improving efficiency and enabling installation in unique spaces. Stations may be located in the curb space of the rights-of-way, other public rights-of-way such as plazas and sidewalks that are able to provide adequate access, and on private property. It is anticipated that the existing Pronto station locations may either be replaced with new equipment or that new locations would be selected during implementation. Replacing and installing new stations is not expected to require heavy machinery and station anchoring to ground surfaces is minimal. The BSP pedal-assisted bicycles and station systems would likely use the power grid system.

The goal of the BSP is to increase the number of bicycles in the existing system, expand beyond the existing service area (see Figure 1), and continue expanding coverage throughout the city consistent with City priorities. Bike share systems naturally supplement all types of transit service. A priority for the service area expansion is in high volume transit station and trip generating areas which tend to be located in urban centers and urban villages identified in the Comprehensive Plan. These areas have high existing and future population growth and mobility demand. Similarly, station locations are also influenced by mobility generators which are major origins/destinations for bike trips and may include: transportation nodes, multi-modal hubs, vehicle parking facilities, universities, tourist destinations, dense residential areas and major employment areas. The bicycle and transit networks outlined in the Bicycle and Transit Master Plans are also considerations for station locations and sizing. One of the strategies outlined in the Transit Master Plan states that bike share expansion should enable seamless transfers between RapidRide and bike share.

The final locations of stations and the service area would be developed through additional planning efforts and a robust public outreach process prior to implementation. Certain residential zoning districts do not allow for bike share stations, which are described in Section B.8.e below. The City's priority framework is described in more detail in Section A.12 below.

The total number of bikes and the density of the system would be calculated according to the coverage area and population. The City's priority for the minimum density for the BSP is five stations per square mile. To balance size and cost the BSP would be formulated to be in the right place with the right size to maintain high usage rates and respond during peak demand periods. The BSP is anticipated to begin with about 101 stations covering approximately 14 square miles with seven stations per square mile. This may include the 54 existing replaced/new locations, 25 expansion locations, and 22 low-income expansion locations. The coverage by neighborhood would be determined during program development and public outreach but a general preliminary overview is provided in Section A.12 below and in Figure 1.

Long term, the City envisions expanding the BSP into all neighborhoods where appropriate and feasible with upwards of 2,500 or more bicycles. Funds for long-term

expansion may include grants, sponsorships, advertising, investment from the contractor, Bewegen, or surplus from the system.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The BSP applies to the entire city. The existing service area operates 54 stations covering primarily Lower Queen Anne, Belltown, Downtown, Pioneer Square-International District, South Lake Union, Capitol Hill-First Hill, Eastlake, and the University District. It is anticipated that the expanded service area would initially generally extend north to Queen Anne, Fremont-Wallingford, Phinney Ridge-Greenlake, Roosevelt-Ravenna, and Greenwood-North College Park-Maple Leaf; and south to Portage Bay-Montlake, Industrial District, Yesler Terrace-Minor-Atlantic, Beacon Hill, Columbia City, Holly Park-Brighton, and Mount Baker. The plan prioritizes expanding the service area as follows:

- Increase access to transit by incorporating high volume transit stations and RapidRide corridors in the service area.
- Support low-income residents by placing optimally a minimum 20 percent of stations in low-income neighborhoods or having low-income neighborhoods represent 20 percent of the service area. Eligible neighborhoods would be defined by the City with some or all based on the use of its most current distressed zip code map (see Figure 2). A significant portion of the stations are anticipated to be placed in southeast Seattle.
- Promote a financially sustainable system incorporating revenue generating areas in the service area while still achieving the equity requirements noted above.
- Maximize ridership and membership incorporating trip generating areas in the service area.
- Create a highly functional network with a minimum density throughout the system of 50 bikes (or five stations) per square mile, and for station-based systems, no station more than 1 mile from another station.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site: *[Check the applicable boxes]*

☒ Flat ☒ Rolling ☒ Hill ☒ Steep Slopes ☐ Mountainous
☐ Other: (identify)

The existing BSP service area would expand to other areas throughout the city. Topography varies from flat to rolling hills, including steep slopes in some areas. Topography may restrict some areas from being feasible bike share station locations. The use of pedal-assisted bikes would more easily allow users to navigate the city's varying topography.

b. What is the steepest slope on the site (approximate percent slope)?

The BSP would be installed on sidewalks, curb space and other locations in the rights-of-way and on private property where slopes generally range from flat to less than 10 percent.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Seattle has a variety of soil types, mostly glacial in nature. There is no prime commercial farmland within the city's boundaries. Station installation would not require grading or soil disturbance.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

There are indications and a history of unstable soils in certain locations within Seattle. These locations have been designated by the City as Environmentally Critical Areas (ECAs) and are subject to development restrictions. The BSP would be located in the existing rights-of-way and on adjacent private property where no effects are anticipated to ECAs.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate the source of fill.

It is not anticipated that filling or grading would be required for stations. However, if

needed, specific types and excavation quantities for stations would be evaluated during the implementation of individual projects.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

It is not anticipated that erosion would occur as a result of installation or operation of the BSP.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The BSP would be installed within existing rights-of-way and on adjacent private property and is not anticipated to increase impervious surfaces. However, if needed, SDOT will evaluate construction of any new or replaced impervious surfaces during station-specific review.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

SDOT will follow City of Seattle Standard Specifications for Road, Bridge and Municipal Construction, the Stormwater Management Manual for Western Washington, and construction Best Management Practices (BMPs) where applicable to control any potential erosion and sediment runoff during the development and installation of the BSP.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During installation of the BSP there may be negligible dust, odors and exhaust emissions from construction equipment to remove, replace, and/or install new stations in the service area.

Implementation of the BSP would have beneficial effects on air quality. The BSP helps implement the City's Climate Action Plan by prioritizing investments in improvements for more bicycle lanes, bicycle intersection safety, and increasing bicycle facilities. The Climate Action Plan has the following Transportation and Land Use Actions to implement related to bike sharing:

- *Expand on-street bicycle racks and facilitate provision of off-street bicycle parking and bike sharing*.

- *Participate in multi-agency efforts working to support bike sharing, vehicle sharing, and ride sharing.*

Since transportation is the number one contributor to greenhouse gas (GHG) emissions in the Seattle region, increasing bike trips helps the City meet its Climate Action Plan actions by reducing emissions from motor vehicles.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions or odor that would affect the proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

During the design and installation of the BSP, SDOT will follow City of Seattle Standard Specifications for Road, Bridge, and Municipal Construction and BMPs where applicable to reduce construction-related air pollution and dust. Once implemented, the BSP would be expected to reduce emissions by encouraging more bicycle activity thereby contributing to a decrease in automobile use. For example, the City created a model to predict trips and projected that for a 1,000 bike system (100 stations) there would be up to 870,000 total trips, many of which would likely provide an alternative for vehicle trips.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Seattle contains numerous creeks, streams, and other bodies of water, including the Duwamish Waterway, Ship Canal, Lake Union, Lake Washington, and Puget Sound.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

The BSP may place stations adjacent to the waters described above and other waterbodies in Seattle. SDOT will design all stations to comply with the Shoreline Master Program Regulations, Stormwater Code, Grading Code, and all other pertinent water quality regulations.

3) **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

   The BSP would not dredge or fill surface waters or wetlands.

4) **Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

   The BSP would not require surface water withdrawals or diversions.

5) **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

   The BSP would be located in existing rights-of-way and adjacent private property outside of the 100-year floodplain of waterbodies.

6) **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

   The BSP would not involve any discharges of waste materials to surface waters.

b. Ground:

1) **Will ground water be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.**

   The BSP would not withdraw or discharge to ground water.

2) **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals . . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

   The BSP would not discharge waste material from septic tanks or other sources.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The BSP would be developed within current rights-of-way and adjacent private property. Stations would not generate any additional runoff to that already existing. Runoff would follow existing drainage patterns through City storm drain facilities.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No. BMPs will be implemented during station installation as appropriate to avoid waste materials from entering ground or surface water.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

The BSP would be developed within current rights-of-way and adjacent private property and will not affect drainage patterns. Stormwater control improvements would be implemented, if determined to be required, per the Seattle Stormwater Code.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Station installation will follow the City of Seattle Standard Specifications for Road, Bridge and Municipal Construction, the Stormwater Management Manual for Western Washington, and BMPs where applicable to reduce and control any potential surface, ground or runoff water impacts from construction. The BSP will meet all City of Seattle drainage requirements for collection, detention, and treatment.

4. Plants

a. Types of vegetation found on the site: *[Check the applicable boxes]*

☒ Deciduous trees:	☐ Alder	☐ Maple	☐ Aspen	☐ Other: (identify)
☒ Evergreen trees:	☐ Fir	☐ Cedar	☐ Pine	☐ Other: (identify)
☒ Shrubs				
☒ Grass				
☐ Pasture				
☐ Crop or grain				

☐ Orchards, vineyards, or other permanent crops
☐ Wet soil plants: ☐ Cattail ☐ Buttercup ☐ Bulrush ☐ Skunk cabbage
☐ Other: (identify)
☐ Water plants**:** ☐ water lily ☐ eelgrass ☐ milfoil ☐ Other: (identify)
☐ Other types of vegetation: (identify*)*

There are a wide variety of vegetation types found within the city. The most common types of vegetation found within the rights-of-way include deciduous and evergreen trees, shrubs and grasses. SDOT currently has approximately 40,000 city maintained trees that are inventoried and approximately 130,000 trees exist along Seattle's streets.

b. What kind and amount of vegetation will be removed or altered?

The BSP would occur within existing rights-of-way and adjacent private property. No removal or alteration to existing vegetation is anticipated from installation and operation of the BSP.

c. List threatened or endangered species known to be on or near the site.

The BSP would not affect threatened and endangered or other special status plant species.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The BSP is not anticipated to remove or alter any existing vegetation. However, if vegetation is impacted, SDOT will comply with the City of Seattle Tree Protection Code, and adhere to the policies and goals outlined in the Seattle Urban Forest Management Plan and Trees and Sidewalks Operations Plan.

e. List all noxious weeds and invasive species known to be on or near the site.

Noxious weeds and invasive plant species are not anticipated to be present within the rights-of-way and adjacent private property where stations would be placed.

5. Animals

a. Birds and animals which have been observed on or near the site or are known to be on or near the site: *[Check the applicable boxes]*

Birds: ☐ Hawk ☐ Heron ☐ Eagle ☒ Songbirds
☒ Other: (identify) See below.

Mammals: ☐ Deer ☐ Bear ☐ Elk ☐ Beaver

☒ Other:(identify) See below.

Fish: ☐ Bass ☐ Salmon ☐ Trout ☐ Herring
☐ Shellfish ☐ Other: (identify)

There are a wide variety of animals found within the city. Rodents including mice and rats, and squirrels and raccoons are common urban species that occur in the rights-of-way. Common urban bird species include crows, pigeons, doves, starlings, robins, gulls, and house sparrows.

b. List any threatened or endangered species known to be on or near the site.

The BSP would not affect potential threatened and endangered animal species.

c. Is the site part of a migration route? If so, explain.

The City of Seattle is within the Pacific Flyway. The Pacific Flyway encompasses the entire Puget Sound Basin.

d. Proposed measures to preserve or enhance wildlife, if any:

Installation and operation of the BSP is not likely to impact wildlife.

e. List any invasive animal species known to be on or near the site.

Invasive animal species are not anticipated to be present within the rights-of-way and adjacent private property where stations would be placed.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Developing the BSP would require fuels and electricity use during the installation phase to operate equipment and periodically thereafter for routine maintenance and repair activities. The BSP would use pedal-assisted bicycles and stations that would likely use the power grid system. The system is expected to use approximately 48 volts and a bike that is fully depleted is anticipated to charge in 90 minutes. It is anticipated that a battery would hold enough power to travel 40 miles on a single charge. The unlocking mechanism at stations would be powered by the bikes' battery. Batteries would have a rapid recharge rate and have a sufficient range for high volume use.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The BSP would not affect the potential use of solar energy by adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

It is anticipated that maintenance and cleaning activities would be performed with hybrid transport vehicles for the system where available. While solar power may not be feasible for the new BSP, the system would efficiently use the power grid system to power stations and bikes.

7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Construction activities are not anticipated to uncover contaminated soils or result in potential environmental health hazards, such as exposure to toxic chemicals, hazardous waste or spills. All work would be within rights-of-way and adjacent private property in previously disturbed areas and there is not anticipated to be ground disturbance during installation of bike share stations.

1) Describe any known or possible contamination at the site from present or past uses.

SDOT does not anticipate encountering potential contamination during implementation of the BSP.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

SDOT does not anticipate encountering existing hazardous chemicals/conditions during implementation of the BSP.

3) **Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.**

Fuels would be temporarily used for vehicles and equipment during installation of bike stations. Fuels would be required to operate vehicles and equipment for station and bike maintenance on a regular basis.

4) **Describe special emergency services that might be required.**

No special emergency services would be required for the BSP.

5) **Proposed measures to reduce or control environmental health hazards, if any:**

Construction crews will have a Health and Safety Plan in place and will follow City of Seattle Standard Specifications for Road, Bridge and Municipal Construction and BMPs where applicable to reduce and control any environmental health hazards that may result from installation of the BSP.

b. Noise

1) **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

Many types of noise exist throughout Seattle, including noise from traffic, rail, maritime, air freight, and operation of equipment. Noise from these and other activities in Seattle would not affect the BSP.

2) **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**

installation of the BSP would likely occur during daylight hours only and would have short-term negligible impacts on noise levels. The BSP would mostly be installed in built out areas with existing traffic that generates noise. By increasing the BSP, noise levels may decrease from vehicle traffic over time, especially in residential areas. There would be periodic negligible noise generated at stations during facility and bicycle maintenance activities.

3) **Proposed measures to reduce or control noise impacts, if any:**

The BSP will comply with the City of Seattle Noise Code (Seattle Municipal Code Chapter 25.08) where applicable. If there is a need for work outside

these times to minimize traffic impacts, SDOT will request a noise variance permit to allow some construction work at night. Construction vehicles will be equipped with mufflers or silencers and other BMPs in the City of Seattle Standard Specifications for Road, Bridge and Municipal Construction where applicable.

8. Land and shoreline use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The BSP would connect a variety of land uses in the service area including single family and multi-family residential areas, commercial, industrial, institutional and mixed uses. The BSP is likely to have positive effects on current land uses by reducing vehicle trips and providing more mobility options for connecting urban centers and urban villages. Studies cited in the Bicycle Master Plan show that bike share stations may help stimulate retail sales by inducing additional trips through making new destinations accessible when other modes are inconvenient or unavailable.[1] Further, one of the policies in the Transit Master Plan (Policy TA2.3), is to install bike-share stations at all multimodal hubs, rail stations, priority access nodes and major neighborhood transit destinations to facilitate the last-mile connection to employment sites, retail centers and residences.

b. Has the site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or non-forest use?

No.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?

No.

c. Describe any structures on the site.

Seattle contains many different structures throughout the city rights-of-way. SDOT operates and maintains over 149 bridges throughout Seattle, many of which that provide access for bicycle crossings. There is also a wide variety of street furniture

[1] LDA Consulting for Capital Bikeshare.*2013 Capital Bikeshare Member Survey Report*. 2013.

in the rights-of-way including existing bike racks, information/wayfinding kiosks, utility poles, traffic lights and signs, transit shelters and other objects and pieces of equipment.

d. Will any structures be demolished? If so, what?

SDOT will determine what structures will be replaced, if any, during the development of individual station locations. Structures that may be removed or replaced include bike racks, helmet dispensing units, information/wayfinding kiosks, signage, and other street furniture. However, as described in Section A.12, stations can be easily reconfigured to fit unique space constraints.

e. What is the current zoning classification of the site?

The BSP would occur in rights-of-way and adjacent private property with zoning classifications that may include commercial, industrial, institutional, mixed use, multi-family and several other districts. Per SMC Title 15, bike share stations are prohibited in locations that abut lots zoned Residential Small Lot (RSL), Residential Single-family (SF), Lowrise 1 (L1), Lowrise 2 (L2), Lowrise 3 (L3), and Lowrise 4 (L4).

f. What is the current comprehensive plan designation of the site?

Comprehensive Plan designations within the existing and expanded service area and city include commercial/mixed use, industrial, major institutions, multi-family residential, urban centers, urban villages, and several other designations.

g. If applicable, what is the current shoreline master program designation of the site?

Shorelines of the city include saltwater shorelines, Salmon Bay, Lake Union, the Ship Canal, Lake Washington, Green Lake and the Duwamish River. Seattle shoreline districts have designations which include urban industrial, urban residential and urban general among others. The BSP may be located within 200 feet of all shorelines of the city as the service area expands. SDOT will evaluate any potential impacts to shoreline districts and comply with the Shoreline Master Program Regulations where applicable prior to bike share installation.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

The City of Seattle contains designated ECAs located throughout the city. These areas are considered environmentally sensitive and include landslide-prone, liquefaction-prone and flood-prone areas, wetlands, riparian corridors, steep slopes, fish and wildlife habitat conservation areas, and abandoned landfills. The

BSP would be located in the existing rights-of-way and on adjacent private property where no effects are anticipated to ECAs.

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

No measures are proposed.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The BSP partially prioritizes the existing and expanded service area in high volume transit station and trip generating areas that are common in urban centers and urban villages with the most existing and future population growth and mobility demand.

The BSP is informed by a series of transportation planning and policy initiatives in the Seattle Comprehensive Plan from the Transportation and Land Use Elements, Urban Village Strategy, Bicycle Master Plan, and Transit Master Plan. The Comprehensive Plan guides City decisions on how to improve the transportation system and where to make capital investments including bicycle facilities. Goals and policies related to the BSP from the Transportation Element include:

- Goal TG3: *Meet people's mobility needs by providing equitable access to, and encouraging use of, multiple transportation options*.
- Policy T3.1: *Develop and maintain high-quality, affordable and connected bicycle, pedestrian, and transit facilities*.
- Policy T3.11: *Develop programs and facilities, such as bike share, that encourage short trips to be made by walking or biking*.

The program supports the plan's Urban Village Strategy by prioritizing the BSP in existing urban centers and villages, transit and community centers, and by contributing to mobility options in neighborhood centers. Zoning restrictions are also consistent with the Comprehensive Plan goals to preserve and protect the character of single-family residential areas.

The Bicycle Master Plan Objective 6 is to *identify and implement actions to support and promote bicycle riding*. The BSP is a key long term program for SDOT to promote bicycle riding throughout the city. The plan contains actions within strategies related to the BSP, including:

- Action 4.9.3: *Coordinate with the BSP to integrate bicycle network alignment with station locations*.
- Action 6.3.3: *Partner with the BSP to promote the system and focus on safety for new riders, encouragement programs and wayfinding*.
- Action 6.4.5: *Partner with and support the BSP to encourage expansion to bicycle-friendly neighborhood business districts and identify more opportunities to support bike share in more neighborhoods throughout Seattle*.
- Action 7.8.6: *Work with Seattle Parks and Recreation Department (Parks) to provide bicycle access to and, where appropriate, through parks*. *Assist Parks in updating their bicycle policy to reflect the desire of new riders to travel through parks. Promote bike share and bicycle parking near or within parks.*
- Action 7.8.7: *Assist Seattle Center to update its bicycle policy to address the desire of new riders to safely travel through the Center to access destinations. Promote bike share locations near and within Seattle Center.*

The Transit Master Plan articulates a long-range vision where most residents can walk or bike to high-quality, high-capacity transit. Bike share naturally supplements all types of transit service and offers a last-mile connection to and from transit. The mobility corridor approach coordinates the plan with the Bicycle Master Plan, among other mobility needs, and outlines policies for cyclists including providing bike facilities and bike share stations in transit corridors and at transit stops.

Strategy 2 in the Transit Master Plan is to *develop high-quality primary and supplemental bicycle facilities that link into and along transit corridors and station areas*. Strategy 6 is to *use transportation demand management for end of trip facilities, educational programs, and the development of additional modal alternatives such as bike share*. The plan contains policies within these strategies related to the BSP, including:

- Policy TA2.1: *Integrate high-quality, low-stress bike facilities into linear* mobility corridor *design.*
- Policy TA2.2: *Develop high-quality, low-stress bike connections that parallel and/or intersect priority transit corridors.*
- Policy TA2.3: *Install bike-share stations at all multimodal hubs, rail stations, priority access nodes, and major neighborhood transit destinations to*

facilitate the last-mile connection to employment sites, retail centers, and residences.

- Policy TA2.4: *Supplement each priority transit corridor with supporting bicycle infrastructure and end-of-trip facilities at priority access nodes.*
- Policy TA2.5: *Provide clearly visible and consistent wayfinding signage between transit facilities and all bicycle access approaches.*
- Policy ToN6.2: *Reduce auto-dependency by providing transit supportive services and programs. Promote bike-sharing to improve transit access and extend the range of transit trips.*

The City has established a series of new policies relating to rights-of-way allocation and how decisions are made regarding street space, mobility and access for people. These policies direct SDOT to consider the bicycle realm in making rights-of-way allocation decisions.

m. Proposed measures to ensure that the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

No measures are proposed.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

No measures are proposed.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The BSP would replace and install new stations at street level in the rights-of-way and on adjacent private property. Stations and bicycles are generally below 4 feet

in height and may be made from a variety of materials including aluminum, other metals and plastics.

b. What views in the immediate vicinity would be altered or obstructed?

It is not anticipated that views would be altered or obstructed in the immediate vicinity as a result of the BSP.

c. Proposed measures to reduce or control aesthetic impacts, if any:

SDOT has identified features to be considered in the BSP to reduce aesthetic impacts, including:

- Designing the smallest feasible footprint to enable efficient installation.
- Selecting aesthetically pleasing design that ensures a unified system look and feel, while being compatible with a streetscape and neighborhood context including historic districts.
- Using graffiti resistant materials for stations and bicycles.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Bicycles would contain front and rear LED lights that are automatically active while the bike is in motion. The stations would have a backlit wayfinding panel and there may be negligible glare from station equipment.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No. New light or glare created from the BSP would be typical for the urban centers and urban villages and other locations where they would be located.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

No measures are proposed.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Seattle has many designated and informal recreational opportunities within its boundaries. Seattle Parks and Recreation manages over 400 parks and open areas totaling over 6,200 acres. There are several miles of bicycle lanes, sidewalks and walkways throughout the city.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The BSP would not displace any existing recreational uses.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

The BSP would increase recreational opportunities through a network of stations in the service area. SDOT activities guided by plans and policies and other public/private efforts include initiatives for connecting bicyclists to parks and other destinations through programs such as the Neighborhood Park and Street Fund and Neighborhood Greenways.

The Seattle Complete Streets Ordinance requires that planning, design, and construction of City transportation improvements must provide appropriate accommodation for bicyclists and promote safety for all users. SDOT is implementing a variety of design, engineering and enforcement strategies and actions in the Bicycle Master Plan to make travel safer in the recommended bicycle network in many areas that are adjacent to parks and other recreation areas. The recommended bicycle network proposes to expand from about 135 to 608 miles from building new or upgraded bike facilities.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites located on or near the project site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

Seattle has many places and objects listed on national, state, or local preservation registers. There are seven historic districts and more than 450 designated landmarks within the city. SDOT will evaluate any potential impacts to historic and cultural resources during implementation of the BSP.

b. Are there any landmarks, features, or other evidence of Indian or historic use of occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

Seattle has several landmarks and evidence of historic, archaeological, scientific, and cultural importance within its boundaries. SDOT will evaluate any potential impacts to historic and cultural resources during implementation of the BSP.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the Department of Archaeology and Historic Preservation, archaeological surveys, historic maps, GIS data, etc.

Not applicable.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance of resources. Please include plans for the above and any permits that may be required.

SDOT will evaluate any potential impacts to historic and cultural resources during implementation of the BSP. Projects will be designed to avoid impacts to historic and cultural resources to the extent possible and, if necessary, appropriate mitigation measures will be used to minimize any potential impacts. The City will require that BSP stations are compatible with historic districts. The BSP may be required to consult and/or seek approval from the State Department of Archaeology and Historic Preservation, City Preservation/Historic District Boards, and other applicable agencies.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.

The BSP stations would be located in public rights-of-way and adjacent private property contingent on zoning restrictions and City priorities throughout Seattle. As described in Section A.12 and Figure 1, the potential initial expanded service area includes connections to arterial and non-arterial streets that serve urban centers and urban villages in several neighborhoods north and south of downtown. The bicycle and transit networks outlined in the Bicycle and Transit Master Plans along arterials and other streets and rights-of-way are a consideration for station locations and sizing.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Seattle is served by several public transit agencies, including King County Metro, Sound Transit, Community Transit, Pierce Transit, and Washington State Ferries. Bike share naturally supplements all types of transit service and offers a last-mile connection to and from transit. The BSP prioritizes increasing access to transit by incorporating high volume transit stations, RapidRide corridors, and trip generating areas in the service area. There may also be interoperability between the BSP and other public transit payment systems like the ORCA card. The Transit Master Plan mobility corridor approach and strategies and actions include recommendations for providing bike facilities and bike share stations in transit corridors and at transit stops. See Section B.8.l for more information.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or non-project proposal eliminate?

The BSP may eliminate motor vehicle parking spaces at some station locations in the service area. Title 11 of the Traffic Code authorizes the use of curb space or other parking spaces for bike share stations or other bike-share-related facilities that serve general public transportation purposes. On average, each curb space bike share station could occupy 3.5 parking spaces. Extrapolating from the existing Pronto bike share system where approximately 40 percent of stations require occupying parking spaces, installing 19 of the 47 new stations in areas where parking needs to be removed would potentially result in an estimated loss of 66 parking spaces. However, as described in Section A.12, stations can be easily reconfigured to fit unique space constraints and maximize efficiency to eliminate the need to occupy parking spaces. The program would provide more mobility options to the public and may reduce automobile parking demand in areas where the stations are located.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

BSP stations may be located in curb space of the rights-of-way, other public rights-of-way such as plazas and sidewalks that are able to provide adequate access, and on private property. It is not anticipated that stations would require improvements to existing roads or pedestrian facilities. The BSP is anticipated to begin with about 101 stations covering approximately 14 square miles with seven stations per square mile. The 54 existing Pronto station locations may either be replaced with new equipment or new locations may be selected during

implementation. There may be initially 25 expansion locations and 22 low-income expansion locations. See Section A.11 and Figure 1 for more information.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Yes. BSP stations may be located in the immediate vicinity of water or rail transportation facilities. However, bike users would be guided by street traffic operations and no effects to water or rail transportation would occur.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

As of January 2016, the existing Pronto system hosted 163,026 trips within its service area which began operations in October 2014. The City created a model to predict trips, membership and revenue for a new 1,000 bike share system with 100 stations. Results indicated that there may be 8,000 annual members and 85,000 casual members that would total up to 870,000 annual trips primarily in the existing and expanded service area. The model is based on peer cities including Minneapolis, Washington DC, Boston, Denver, Chicago, Toronto, and Columbus and assumptions underlying the model were conservative. Long term, the City envisions expanding the BSP into all neighborhoods where appropriate and feasible with upwards of 2,500 or more bicycles increasing the number of trips in an expanded service area.

g. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

h. Proposed measures to reduce or control transportation impacts, if any:

BSP stations may be reviewed through an optional Street Use Permit. BSP stations will maintain access for pedestrians, and bus and commercial loading zones. Stations will also provide setbacks from alleys, curbs, curb ramps, corner curb radii, and other street fixtures and amenities. The BSP will also maintain access for disabled-person parking zones and conform to Americans with Disabilities Act guidelines. All traffic control will be in accordance with the City of Seattle Traffic Control Manual for In-Street Work (2012).

15. Public services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

The BSP is not anticipated to increase the need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

The King County Board of Health requires that bicyclists in Seattle on a public roadway, bicycle path, or any rights-of-way or publicly owned facility wear a protective helmet designed for bicycle safety. All BSP stations will have available bike helmets that will be inspected on a regular basis and that meet standard safety requirements. The City and bike sharing website, along with other materials and public outreach methods, will provide public education on the safe use of bicycles and helmets and the rules of the road.

The bike's double sided locks would ensure they are fully secured and resistant to theft, tampering, and vandalism. Bikes would also have secondary locks that allow for quick stops during rides without returning to stations.

16. Utilities

a. Utilities currently available at the site, if any: *[Check the applicable boxes]*

☐ None
☒ Electricity ☒ Natural gas ☒ Water ☒ Refuse service
☒ Telephone ☒ Sanitary sewer ☐ Septic system
☐ Other (identify)

Public and private utilities are available throughout the city located within rights-of-way and on adjacent properties.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Installation of BSP stations may relocate some above- or below-ground utilities that will be coordinated with appropriate agencies. Once implemented, the BSP would likely use the power grid system. Any potential connections to utility services may require permits from Seattle City Light and Seattle Department of Construction and Inspections. The overall BSP is not expected to change demand for utility services.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: .....

Date Submitted: 10/11/2016

Figure 1 – Potential Initial Bike Share Service Area

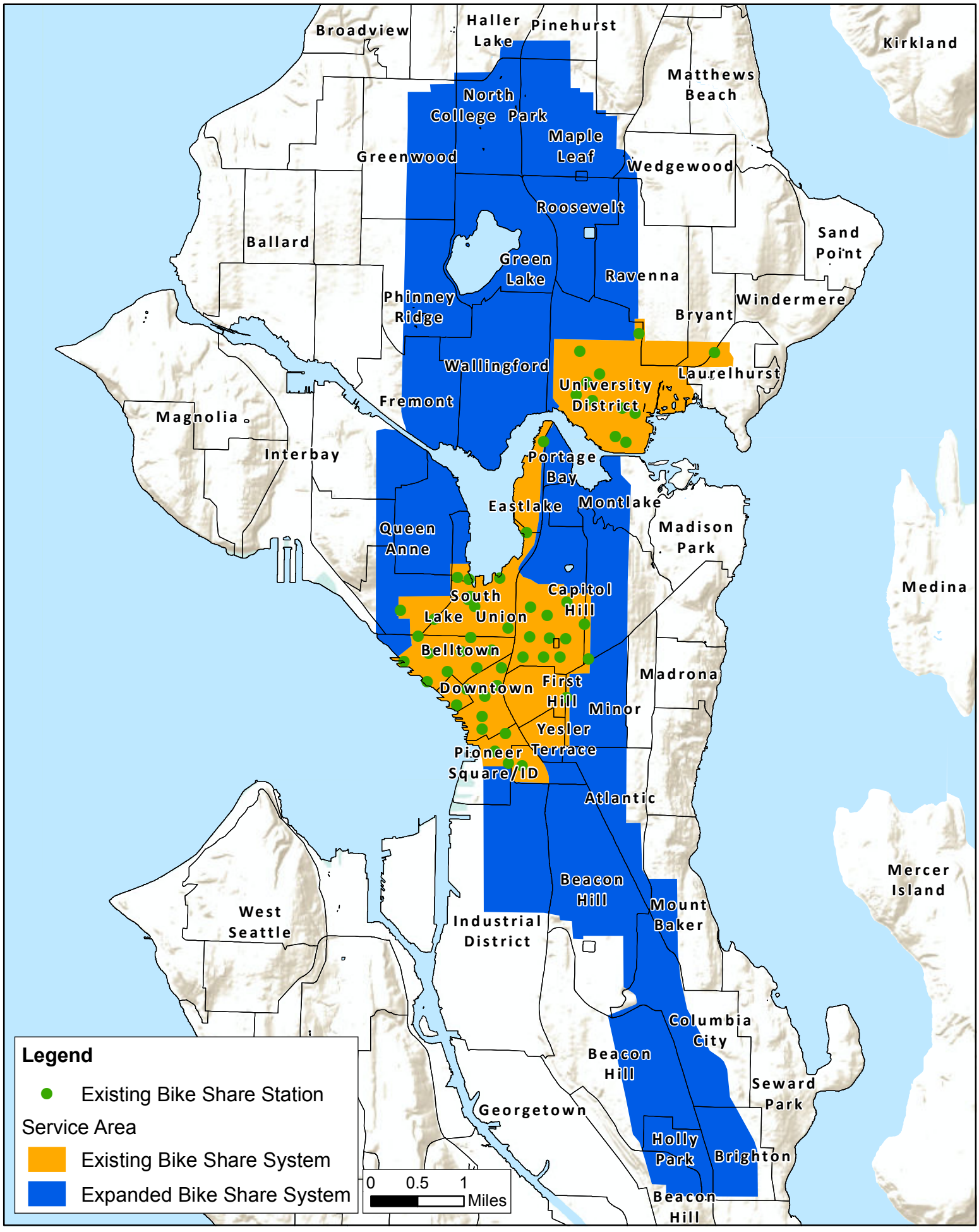


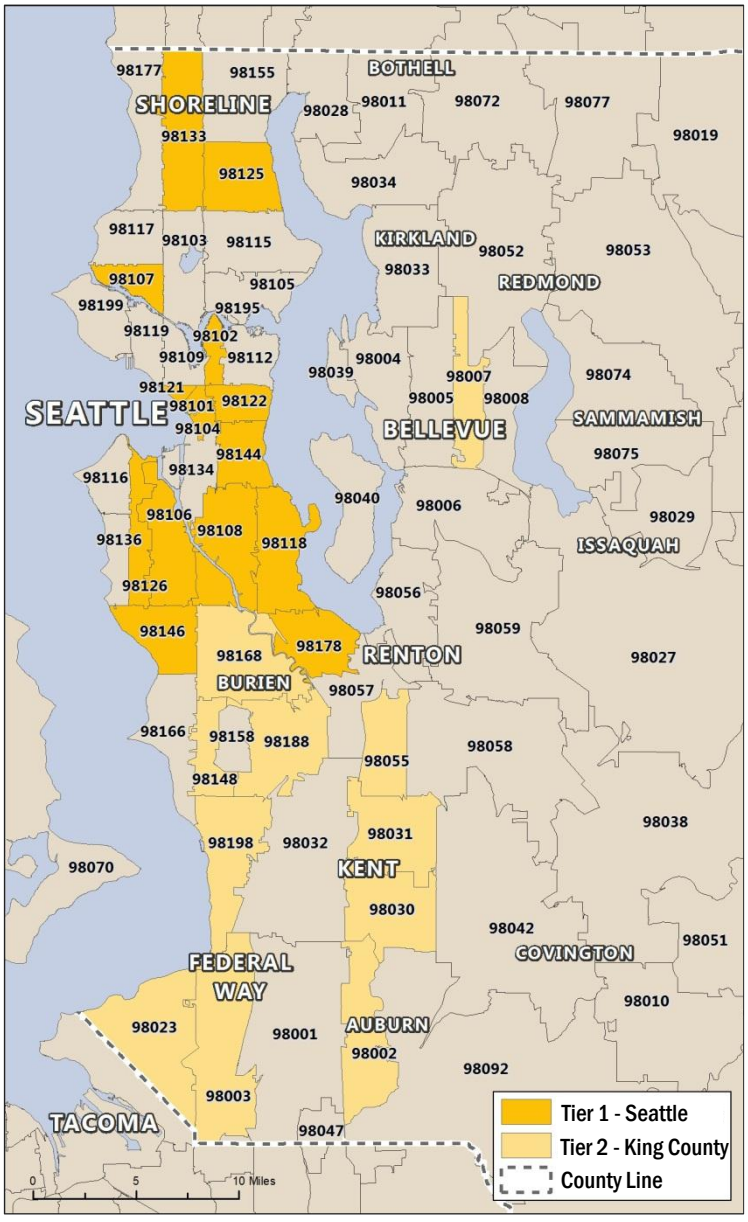
Figure 2 - Current ZIP Code Map of Low-Income Neighborhoods

City of Seattle

PRIORITY HIRE in the CITY of SEATTLE and KING COUNTY

Economically distressed ZIP codes in Seattle and King County were based on several indicators:
1. People living under 200% of the federal poverty line.
2. Unemployment rate.
3. Those over 25 without a college degree.

CURRENT Priority Hire Economically Distressed ZIP Codes



Source: Community Attributes Inc., Priority Hire ZIP Codes, 2014

Tier 1	Seattle Neighborhood	ZIP Code
Tier 1	Downtown	98101
Tier 1	Capitol Hill/Eastlake	98102
Tier 1	Downtown/ID	98104
Tier 1	Delridge	98106
Tier 1	Ballard	98107
Tier 1	S. Beacon Hill/South Park	98108
Tier 1	Rainier Valley/Rainier Beach	98118
Tier 1	Belltown	98121
Tier 1	Central District	98122
Tier 1	Lake City/Northgate	98125
Tier 1	Delridge/High Point	98126
Tier 1	Bitter Lake/NW Seattle	98133
Tier 1	N. Beacon Hill	98144
Tier 1	White Center	98146
Tier 1	Rainier Beach/Skyway	98178

Tier 2	King County Neighborhood	ZIP Code
Tier 2	Kent/Auburn	98002
Tier 2	Federal Way	98003
Tier 2	Bellevue	98007
Tier 2	Federal Way	98023
Tier 2	Kent	98030
Tier 2	Kent	98031
Tier 2	Renton	98055
Tier 2	Burien	98148
Tier 2	Boulevard Park/Tukwila	98168
Tier 2	SeaTac/Tukwila	98188
Tier 2	Des Moines	98198